



ZAMBIA

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THE PROJECT

Project Location: Munuhwa (1), Chirundu, Southern Province, Zambia

GPS Coordinates: Latitude:15 58.03 S, Longitude: 28 45.07 E

People Served: 200

Report Presented To: Decimus

THE COUNTRY

According to the latest UNDP report, Zambia is ranked 150th out of 169 countries with comparable data in the United Nations Human Development Index. Nearly two-thirds of Zambians live on less than \$1 per day. The country also hosts tens of thousands of refugees who have fled fighting in the Democratic Republic of Congo, straining Zambia's already overburdened resources.

Despite recent economic growth in Zambia, social indicators continue to decline, particularly life expectancy and infant and maternal. Additionally, Zambia's economic growth is not enough to support the rapid expansion of the population or the strain which HIV/AIDS places on government resources.

Zambia has been hit very hard by HIV/AIDS, with an adult prevalence rate of over 16 percent. More than 30,000 Zambian children are born HIV-positive each year as a result of the mother-to-child transmission rate of the disease. The AIDS epidemic in this country has also left a generation of orphans in its wake: more than 20 percent of Zambian children have lost one or both parents to the disease.

The lack of adequate water sources and sanitation facilities has created serious health risks for this population, resulting in lower life expectancy, higher infant mortality, and high rates of preventable disease transmission. Only 58 percent of the Zambian population has access to an improved water source; this number drops dramatically (to 36 percent) when considering the rural population alone. Zambia's semi-arid climate, with an average annual rainfall of only 70 centimeters, is a further burden to water resources here. Women and children are forced to walk many miles to collect water from one of the few water points in the country—water which will most likely make them sick.

OUR WORK IN ZAMBIA

Since 2007, Living Water International has been working to provide sustainable water solutions and health and hygiene lessons for rural communities in Zambia. Nearly 160 water projects (new wells and well rehabs) have been completed here since then, and our Living Water Zambia team plans to drill 50 new wells in the coming year, providing clean, safe water to thousands of people throughout the country.

THE DATA

Population: 13.4 million

- 40% without access to an improved water source
- 51% without adequate sanitation services
- 68% living below the poverty line

Life expectancy: 49 years

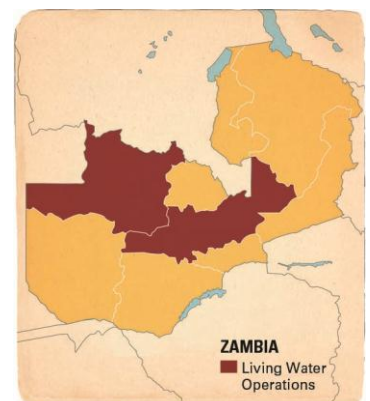
Infant mortality rate:

90 per 1000 live births

GNI per capita: \$1254 USD

Sources: World Bank, UNICEF, USAID, CIA World Factbook

Official statistics often understate the extent of water and sanitation problems, sometimes by a large margin. Insufficient resources for monitoring population and/or coverage as well as varying definitions of coverage and access contribute to statistical variability.



GENERAL INFORMATION

When the LWI Zambia team arrived, community members were utilizing a river located half of a kilometer away from the community to meet all of their water needs. Because of this and the community's practice of open defecation, families were suffering from cholera, dysentery and malaria. During the team's stay, community members assembled a water committee consisting of five men and five women who assisted the team with the water project whenever possible, provided any materials they had available and guarded the team's equipment during the night. A LWI Zambia team member shared that there was extremely good reception from the village community. Most residents earn a living by subsistence farming and the nearest school is located seven kilometers away from the community. Before leaving the community, the team provided community member, Rob Celyer, with a LWI Zambia contact number in case their well were to fall into disrepair, become subject to vandalism or theft.

TESTIMONY

The LWI Zambia team had an opportunity to meet with fifty year old community member and subsistence farmer, Mikrand Palinongwe, who stated, "The new water source has good water and is safe for residents."

CHARACTERISTICS OF THE WELL

Project Details

Location Name	Munuhwa (1), Chirundu, Southern Province, Zambia	
Type of Location	Village	
Work Type	New Borehole	
Region/Province/District	Chirundu, Southern Province	
GPS Coordinates	Latitude:15 58.03 S	Longitude: 28 45.07 E
Altitude	390 m	
Total depth	51 m	
Static level	15.77 m	
Diameter of casing	110 mm	
Casing material	Steel	
Screen	Start: 39m	Stop: 48 m
Pump Type	India Mark II	
Depth of cylinder	30 m	
Well yield	0.80 liters per minute	
Gravel pack	Yes	
Sanitary seal depth from surface	5	
Community Population	200	

WATER QUALITY TEST

Test Results are from	Local Government	
	Total Dissolved Solids (as per T.D.S meter) :	2130
	pH:	7.91

Total Hardness: 320 ppm

Nitrate/Nitrites: 0.001 ppm

Chlorination

Yes

(It is policy of Living Water International to shock chlorinate water wells at a minimum: after completion of drilling and installation of pump and before use by end users, After the well seal is broken during maintenance or rehabilitation and before use by end users.)

HYGIENE EDUCATION

During the hygiene education, the LWI Zambia team addresses: Hand washing, how to properly transport and store water, disease transmission and prevention, how to maintain proper care of the pump, as well as signs and symptoms of dehydration and how to make Oral Rehydration Solution. All of these lessons are taught in a participatory method to help community members discover ways to improve their hygiene and sanitation choices, and implement community driven solutions.

EVANGELISM

The community of Munuwa formed a cell church as a result of the Jesus film. They chose a place where they will be worshipping and erected a rudimentary structure with local materials for a church. At least they have a place to congregate as believers.

PHOTOS



Previous water source and river located half of a kilometer away from the community and depended on by the entire community to meet all of their water needs.



Completed water project accessible by the entire community.



Community members gathered to collect clean, safe drinking water from their new and reliable water source.



New, safe water source.



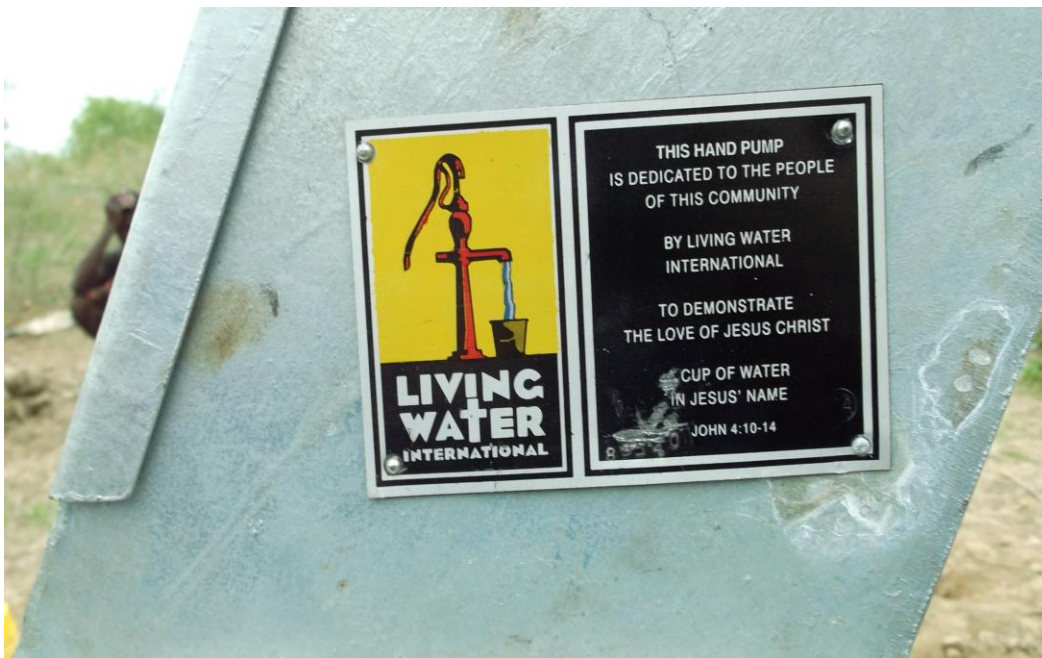
Community members gathered to collect safe drinking water.



Water committee member who was provided with a LWI Zambia contact number in case their well were to fall into disrepair, become subject to vandalism or theft.



Project in process.



Plaque on pump.



Community children gathered to pump clean, safe drinking water.



Clean drinking water accessible by the entire community.



Close up of plaque.



Plaque on pump.



The LWI Zambia team had an opportunity to meet with fifty year old community member and subsistence farmer, Mikrand Palinongwe, who stated, "The new water source has good water and is safe for residents."